

Memorandum of Agreement

For Industry Access to

Aircraft Situation Display and National Airspace System Status Information Data

June 1, 2006

1 Parties

This Memorandum of Agreement (MOA) is entered into by and between the Federal Aviation Administration (FAA) and _____, hereafter referred to as a Direct Subscriber (defined in Section 5.4 below). The parties do hereby agree and obligate themselves to abide by the rights, responsibilities, and other conditions defined in this agreement.

2 Background

In accordance with principles embodied in the Technology Transfer Act, the Federal Aviation Administration (FAA) is making air Traffic Flow Management (TFM) data, such as filtered Aircraft Situation Display (ASD) and National Airspace System (NAS) Status Information (NASSI) data, as well as subsets of that data, available to the aviation and other industries based on defined classes of users.

The ASD data includes the near real time position and other relevant flight data for every civil instrument flight rules (IFR) aircraft receiving radar services within the NAS. The filtered data, meaning that military and sensitive operations are not included, is referred to as ASD to Industry (ASDI) data. The NASSI data includes a wide range of information regarding the status of NAS components, such as airport runway visual range and special use airspace data.

In 1992, the FAA joined with the Air Transport Association of America through a Cooperative Research and Development Agreement to research the operational and economic value of providing ASDI data to the aviation industry. The research with a prototype capability clearly showed that industry access to ASDI data can provide immediate and significant economic benefits to airlines by providing an increased dispatching flexibility to more efficiently manage their own operational (e.g., aircraft, aircrews, etc.) resources. The research also demonstrated that ASDI data could present an opportunity for other commercial and academic institutions to build upon the data to achieve advances in commercial services to the aviation community and aviation-related research. As a result of these findings, on December 5, 1997, the FAA established the ASDI data feed.

Given the economic and aviation service benefits that have evolved from the release of ASDI data, it has become clear that the additional operational flow management data generated through the Collaborative Decision Making (CDM) program could stimulate even more benefits to the aviation community and the public. Therefore, in September 1998, the FAA authorized the augmentation of ASDI data through the

release of selected NASSI data elements. This MOA is the agreement for authorized access to filtered ASDI and/or selected NASSI data.

As a result of the aviation-related attacks of September 11, 2001 in the United States, the FAA reviewed security risks related to the ASDI/NASSI feed and determined that only Subscribers that are Class One Users (See Section 5.2) are authorized to receive the full near real time ASDI and NASSI data set (this includes Direct Subscribers with Class One Indirect Subscribers). Subscribers that are Class Two Users (See Section 5.3) are not authorized to receive near real time flight tracking and position messages. Class Two Users are only authorized to receive the full ASDI and NASSI data set that has been time-delayed at least 5 minutes. The scope and content of ASDI/NASSI data that will be available to government users and research and development organizations will be determined by the FAA on a case-by-case basis. Sections 7.1 and 7.2 of this MOA describe the responsibilities of the FAA and Direct Subscribers, including limits on redistribution of the ASDI and NASSI data.

3 Purpose

This MOA identifies the rights, responsibilities, and other conditions for the FAA and the Direct Subscribers (both Class One and Class Two Users) of ASDI and NASSI data. This MOA supersedes the ASDI/NASSI MOA dated March 17, 2004.

4 Authority

The FAA's authority to enter into this MOA is governed by 49 United States Code (U.S.C.) 106 (l)(6).

5 Definitions

5.1 ASDI Data:

The subset of ASD data as defined by current technical specifications that are provided to commercial air carriers and other aviation-related industries.

5.2 Class One User:

A Class One User is a professional aviation organization with an established flight dispatch or planning function that requires near real time positional flight-tracking capabilities. This organization must have direct responsibility for dispatching or tracking aircraft it owns or be contracted by the owner of the aircraft to do so. Examples are airlines, regional air carriers, air taxis, any organization providing dispatch or tracking functions for aircraft owners, flight operation centers, government users (as described in Section 5.5), and professional flight planning service providers.

Fixed Base Operators (FBOs), corporate flight departments, and part 135 operators must have direct responsibility for dispatching or tracking aircraft to qualify as a Class One User. The FAA shall be the final arbiter for any disputes regarding the interpretation of this Section.

5.3 Class Two User:

A Class Two User is any user not meeting the criteria of a Class One User (e.g., most general aviation; non-aviation-related entities and individuals; any other entity without a specific requirement for near real time positional flight-tracking). Class Two Users can obtain Class Two (time-delayed data) either directly from

the FAA Enhanced Traffic Management System Hubsite Class Two ASDI/NASSI interface or from Direct Subscribers that provide time-delayed Class Two data.

5.4 Direct Subscriber:

A Direct Subscriber is any entity that receives the ASDI/NASSI data (Class One or Class Two) directly from the FAA Enhanced Traffic Management System Hubsite. A Direct Subscriber will be eligible to receive Class One data only if they have Class One Subscribers as defined in section 5.2. Entities (e.g., AT&T, MCI, Sprint) solely providing communications support under contract to Direct Subscribers are not considered to be Direct Subscribers.

5.5 Government User:

A Government User is a national, federal, state, or local government organization, airport authority, or authorized organization acting on behalf of a Government organization.

5.6 Indirect Subscriber:

An Indirect Subscriber is an entity that receives the ASDI/NASSI data but not directly from the FAA Enhanced Traffic Management System Hubsite. Indirect Subscribers that redistribute data received from Direct Subscribers are subject to the same requirements and restrictions as the Direct Subscriber, as detailed in section 7.2. If an Indirect Subscriber receives Class One data, that Indirect Subscriber will be subject to the audit in accordance with section 7.2.12. However, Indirect Subscribers that receive and redistribute only Class Two data are not subject to the audit in section 7.2.12.

5.7 NASSI Data:

The subset of NAS status information that is provided to Direct Subscribers. The NASSI data includes a wide range of specific TFM-related airport, airspace, and system information that reflects the condition and operational status of the NAS. As is the case with the ASDI feed, the elements of the NASSI data revealing aircraft position are only available in near real time to Class One Users and with at least a 5 minute time-delay to Class Two Users. Other NASSI data may be made available to Class Two Users at the FAA discretion.

5.8 Data Access:

Class One Users are authorized to receive the full near real time ASDI and/or NASSI data feed (Class One data). Class Two Users are only authorized to receive the full ASDI and/or NASSI data feed that has been time-delayed at least 5 minutes (Class Two data). Government organizations and aviation system research and development industries will be categorized by the FAA on a case-by-case basis. Access and use restrictions for non-United States domestic ASDI/NASSI data are provided in section 10 of this MOA. Direct Subscribers may access ASDI data only (or a subset thereof), NASSI data only (or a subset thereof), or both ASDI and NASSI data (or subsets thereof).

6 Scope

This MOA applies to the transmission, receipt, utilization and redistribution of ASDI and/or NASSI data by Direct Subscribers and the FAA.

7 Rights and Responsibilities

7.1 Federal Aviation Administration (FAA)

The FAA shall:

7.1.1

Provide the Direct Subscriber with the technical specifications, communications protocols, equipment requirements, ASDI and/or NASSI data message formats, and other relevant technical information necessary to receive and interpret the ASDI and/or NASSI data stream. The FAA shall also provide a point of contact for technical support to the communications entity providing the ASDI and/or NASSI physical interface.

7.1.2

Be responsible for providing the Direct Subscriber with physical access to ASDI and/or NASSI data. The Class One User data interface will provide the full near real time ASDI and NASSI message set as defined by current technical specifications. The Class Two User data interface will provide ASDI and/or NASSI data time-delayed at least 5 minutes.

7.1.3

Provide class-appropriate ASDI and/or NASSI data consistent with the timeliness, accuracy, reliability, maintainability, and availability of the operational TFM system data.

7.1.4

Have the sole right to relocate, upgrade, and/or update the ASDI and/or NASSI data stream in order to take advantage of advances in technology and for other reasons. The FAA shall provide notice of such changes to the Direct Subscriber not less than sixty (60) calendar days prior to their implementation.

7.1.5

Have the sole right to modify the content (including data elements) of the ASDI and/or NASSI data stream. The FAA shall provide notice of such changes to the Direct Subscriber not less than sixty (60) calendar days prior to their implementation.

7.1.6

Have the sole right and responsibility to review prior to public availability, any and all applications of ASDI and/or NASSI data that can or are intended to be directly and freely accessed by the general public via an unrestricted, public access, mass media communications technology (e.g., Internet, television).

7.1.7

Have the sole right to identify Direct and Indirect Subscribers not in compliance with this agreement and to interrupt, or direct the interruption and/or termination (see Section 15) of the ASDI and/or NASSI data stream to those recipients.

7.1.8

Have the sole right, with timely written notification, to modify this MOA if it is in the best interests of the United States Government, the aviation industry, or the general public.

7.1.9

Have the sole right to establish the criteria for the annual Direct and Indirect Subscriber Class One audits.

7.1.10

Take appropriate measures to protect proprietary, privileged, or otherwise confidential information that may come into its possession as a result of this MOA.

7.1.11

It is important to note that service interruptions with the ASDI/NASSI data may occur due to operational necessity, safety and security concerns, and/or hardware failure. Final authority to deny access to data in accordance with the terms of this agreement shall reside with the ASDI/NASSI POC (identified in Section 18 below). The FAA shall not be held responsible or retain any legal obligation as to the accuracy, validity, or continued availability of the data.

7.2 Direct Subscriber

The Direct Subscriber shall comply with the provisions identified in this Section. A violation of any of these provisions shall be considered an information security violation and the FAA's rights under sections 7.1.11, 14, and/or 15 shall apply. The Direct Subscriber shall:

7.2.1

Provide and maintain the hardware, software, communications facilities, and any other resources needed to receive and interpret the ASDI and/or NASSI data. The Direct Subscriber receiving Class One data shall create and maintain a system architecture that guarantees that near real time Flow Control Track and/or Flight Data Block Information (TZ and/or TO messages) are only provided to Class One Users. The Direct Subscriber receiving Class One data shall ensure that any Class Two data provided is time-delayed at least 5 minutes. The Direct Subscriber shall be required to comply with the procedures for non-United States domestic ASDI/NASSI data and the Audit Requirements for Direct Subscriber Receiving Class One Data as provided for in section 10 of this MOA. In the event the ASDI and/or NASSI data stream is relocated, upgraded, updated, and/or modified, the Direct Subscriber shall be responsible, at its own expense, for providing and maintaining the hardware, software, communications facilities and all other resources needed to continue to receive and interpret the ASDI and/or NASSI data. The Direct Subscriber shall ensure that any data provided to an Indirect Subscriber is filtered according to the definitions in section 5 of this MOA and any Class One Indirect Subscribers have a valid audit on file with the FAA.

7.2.2

Interact with the ASDI/NASSI data hub in accordance with information security requirements defined by the FAA in the ASDI Functional Description and Interface Control Document.

7.2.3

Agree to provide and demonstrate to the satisfaction of the FAA ASDI/NASSI POC (identified in Section 18 below) the capability to selectively block the display of any data related to any identified aircraft registration number.

7.2.4

Provide the FAA ASDI/NASSI POC with the conceptual, operational, and technical details for any and all planned applications of ASDI data, or enhancements to existing applications that can or are intended to be directly and freely accessed by the general public via an unrestricted, public access, mass media communications technology (e.g. Internet, television).

7.2.5

Not contact the: (a) FAA ASDI/NASSI POC; (b) any FAA air traffic control facility; or (c) the Air Traffic Control System Command Center (ATCSCC) regarding operational traffic flow management issues. The only exceptions are authorized personnel representing aircraft operators and others explicitly authorized in writing by the FAA ASDI/NASSI POC to do so.

7.2.6

Provide associated Indirect Subscribers with the technical specifications, communications protocols, equipment requirements, message formats, and other relevant technical information necessary to receive and interpret the ASDI and/or NASSI data stream.

7.2.7

Provide associated Indirect Subscribers with any and all documentation received from the FAA regarding the timeliness, accuracy, interpretation, and other properties of specific ASDI and/or NASSI data elements.

7.2.8

Maintain a current and historical listing of all associated Indirect Subscribers and forward that listing to the FAA ASDI/NASSI POC by 1 March of each year, as well as at any time the FAA ASDI/NASSI POC requests such a listing.

7.2.9

Ensure that all agreements/contracts with Indirect Subscribers: (a) extend in writing to all Indirect Subscribers the rights, responsibilities, data use restrictions, exclusion of warranties, limitation of remedies, and liability conditions defined in this document including the classification of users, and the provisions stated in this MOA. ; (b) state that commercial product(s) based on the ASDI and/or NASSI data are not

guaranteed, sponsored, recommended, warranted, or endorsed by the FAA; (c) include the wording in section 8 regarding the issue of personal privacy, (d) prohibit all Indirect Subscribers from contacting the FAA ASDI/NASSI POC or the ASDI/NASSI hub site in the event of technical or system problems, but to direct such communications to their data provider, and (e) prohibit all Indirect Subscribers, (except for authorized personnel representing aircraft operators and others explicitly authorized in writing by the FAA ASDI/NASSI POC to do so) from contacting the FAA ASDI/NASSI POC, any FAA air traffic control facility, or the Air Traffic Control System Command Center (ATCSCC) regarding operational traffic flow issues.

7.2.10

At the written direction of the FAA, interrupt or direct the interruption of the ASDI and/or NASSI data stream to Indirect Subscribers identified by the FAA as being in non-compliance with any of the provisions listed in this MOA (incorporated into the Direct Subscriber/Indirect Subscriber agreement/contract).

7.2.11

Be responsible for compliance with any export control restrictions (e.g., Department of Commerce Bureau of Export Administration) in connection with the use or dissemination of any interface and/or transmission of software or documentation.

7.2.12

Be subject to the audit requirements when receiving class one data (this includes Indirect Subscribers receiving Class One data) as detailed below. An annual audit is required for all Direct Subscribers and Indirect Subscribers that receive ASDI/NASSI Class One data. This audit requirement also applies to Indirect Subscribers who receive Class One data from a Direct Subscribers or another Indirect Subscriber. Direct and Indirect Subscribers receiving only the Class Two (time-delayed) FAA data interface are not subject to the audit requirements. Frequency of audit is annually to be completed by March 31st of each calendar year.

The audit shall be an Agreed-To (Upon) Procedures (attestation type) Audit in accordance with appropriate Statements on Audit Services (SAS) criteria. Direct and Indirect Subscribers requiring annual audit will select their own audit firm. The audit firm must be an accredited CPA firm and meet the standards of the American Institute of Certified Public Accountants (AICPA). The attestation type audits will be conducted in accordance with the Statements on Audit Services (SAS) criteria for Agreed-To (Upon) Procedures Audits.

7.2.13

For *all* Direct and Indirect Subscribers receiving the FAA Class One (real time) data feed, the Auditor will:

Develop a full understanding of the current ASDI/NASSI Memorandum of Agreement (MOA), The FAA point of contact for inquiries will be the ASDI/NASSI POC per section 18 of the MOA.

Have full access to the Direct Subscriber's customer Class One User list and all supporting databases regarding the specific classification of all the Direct Subscriber's Class One customers/clients.

Verify that the Direct Subscriber has internal controls in place to ensure that only Class One Users (as defined in section 5.2 of the MOA) are receiving the Class One Data Feed (as defined in section 5.8 of the MOA) from the Direct Subscriber.

Identify any Indirect Subscribers receiving the Class One Data Feed that do not qualify IAW section 5.2 of the MOA.

7.2.14

For Direct and Indirect Subscribers providing FAA ASDI data to *both* Class One and Class Two Users, the Auditor will:

Review the Direct Subscriber's system architecture for providing service using the FAA Class One Data Feed to understand how the FAA's Class One ASDI Data Feed is provided to Class One Users only.

Test the Direct Subscriber's architecture by applying for both Class One and Class Two service in sufficient sample size to validate that the Direct Subscriber's architecture denies the Class One Data Feed to Class Two Users. This will require the Direct Subscriber to set up two side-by-side graphical displays for auditors to validate Class-specific processing (filtering) at the company level.

Ensure only valid Class One Users identified in section 10 receive access to British flight data (London data).

8 Audit Requirements

8.1

An audit is required for all Direct and Indirect Subscribers that receive ASDI/NASSI Class One data. Direct Subscribers receiving only the Class Two (time-delayed) FAA data interface are not subject to the audit requirements.

8.2

Audit Type: Agreed-To (Upon) Procedures (attestation type) Audit in accordance with appropriate Statements on Audit Services (SAS) criteria.

8.3

Purpose: The overall objective of the audit is to verify that the Class One Subscriber has internal controls in place to ensure that only Class One Users receive the FAA Class One (real time) Data Feed.

8.4

Frequency: Annually, commencing First Quarter, CY 2007. The first audit will be complete by March 31, 2007. Subsequent audits will be completed by March 31st of each calendar year.

8.5

Specific Criteria: For all Class One Subscribers receiving the FAA Class One (real time) data feed, the Auditor will:

1. Develop a full understanding of this ASDI/NASSI Memorandum of Agreement (MOA). FAA point of contact for inquiries will be the ASDI/NASSI POC per Section 18 of the MOA.
2. Have full access to the Class One Subscriber's customer Class One User list and all supporting databases regarding the specific classification of all the Direct Subscriber's Class One customers/clients.
3. Verify that the Class One Subscriber has internal controls in place to ensure that only Class One Users (as defined in Paragraph 5.2 of the MOA) are receiving the Class One Data Feed (as defined in Paragraph 5.8 of the MOA) from the Direct Subscriber.
4. Identify any Indirect Subscribers receiving the Class One Data Feed (as defined in Paragraph 5.8 of the MOA) that do not qualify IAW Paragraph 5.2 of the MOA.

8.6

Additional Criteria: For Class One Subscribers providing FAA ASDI data to both Class One and Class Two Users, the Auditor will:

1. Review the Class One Subscriber's system architecture for providing service using the FAA Class One Data Feed to understand how the FAA's Class One ASDI Data Feed is provided to Class One Users only.
2. Test the Class One Subscriber's architecture by applying for both Class One and Class Two service in sufficient sample size to validate that the Class One Subscriber's architecture denies the Class One Data Feed to Class Two Users. This will require the Class One Subscriber to set up two side-by-side graphical displays for auditors to validate Class-specific processing (filtering) at the company level.

8.7

Access: The Auditor shall have reasonable access to the Class One Subscriber's facilities and personnel to conduct a thorough and expeditious audit. The Class One Subscriber shall prepare documents, demonstrations, and make available company personnel to expedite the audit.

8.8

Deliverables: The Auditor must provide a written report NLT 10 calendar days from the closeout date for the annual audit to ASDI/NASSI POC per Section 18 of the MOA.

8.9

Corrective Action: Audit recommendations or corrective actions required to bring the Direct or Indirect Class I Subscribers into compliance with the MOA shall be implemented in a timely manner (as specified by the FAA in the response to the audit report) or the FAA may take action IAW Section 15 of the MOA.

9 Privacy and Security Interests

The ASDI and NASSI data includes the near real time position and other flight data associated with civil instrument flight rules (IFR) aircraft. While commercial operators conduct business according to a published listing of service and schedule, general aviation operators do not. It is possible that public knowledge of the flight information of general aviation operators could compromise the privacy and/or security of individuals. The protection of such information is not covered under the Privacy Act (5 U.S.C. 552a), and the cost of developing and operating the technical mechanisms required to manage that information exceeds available FAA resources. The FAA recognizes that certain industry initiatives exist to collect requests from aircraft owners to exclude their aircraft from ASDI data feeds available to the public, either in near real-time or in recorded (historical) format. The FAA accommodates these initiatives to the extent they support and respect these privacy and security interests. All Direct Subscribers (as a condition of signing this MOA) and Indirect Subscribers (as a condition of signing agreements with Direct Subscribers) are asked to consider and respect these privacy and security interests when developing and/or marketing ASDI and/or NASSI-based products. If the FAA determines that any Direct and/or Indirect Subscribers develop and/or market products that violate this provision, the FAA's rights under Section 15 shall apply.

10 Non-United States Domestic ASDI/NASSI Data

10.1

A Class One User may receive access to British flight data (London data).

10.2

A Class One User is authorized to receive the London data if it is designated an *approved recipient* by satisfying one or both of the following conditions:

- The Class One User owns and operates aircraft in Europe, and therefore, pays landing fees and air traffic control fees in Europe.
- The Class One User has a customer who owns and operates aircraft in Europe, and therefore, pays landing fees and air traffic control fees in Europe. Only this customer shall have access to this data; this should be verified during the Class One audit.

If the Class One User does not fulfill at least one of these conditions, then that User is not authorized to receive any London data.

10.3

A Direct Subscriber shall ensure the London data access, use, and distribution restrictions defined is enforced. If the Direct or Indirect Subscriber violates this provision, the FAA's rights under section 15 shall apply.

10.4

A Direct Subscriber shall receive written approval from the FAA in order to receive the London data. Without this approval, the Direct Subscriber is only authorized to receive ASDI/NASSI data that does not contain London data.

10.5

The Direct and Indirect Subscribers shall comply with the steps and conditions outlined in the current version of the Aircraft Situation Display To Industry: Functional Description and Interface Control Document in addition to this MOA.

10.6

If the Direct Subscriber receives London data, the audit will verify that only authorized users identified in section 10.2 have access to the data. The FAA shall be the final arbiter for any disputes regarding the interpretation of this Section.

11 RVR Data Terms and Conditions for Use

11.1

The RVR data shall only be used for flight planning purposes and situational awareness, and is not the official RVR. Only the RVR obtained from Air Traffic Control (ATC) is the OFFICIAL RVR.

11.2

All Direct Subscribers/Indirect Subscribers and their Users shall include the following disclaimer with RVR data (This includes but is not limited to passing-down or retransmission to pilots and/or dispatchers):

- This RVR data shall only be used for flight planning purposes. The Runway Visual Range (RVR) obtained from Air Traffic Control (ATC) is the OFFICIAL RVR.

11.3

The Direct Subscriber/Indirect Subscriber shall ensure the RVR data terms and conditions for use defined in this MOA are enforced. If the Direct Subscriber/Indirect Subscriber violates this provision, the FAA's rights under section 15 shall apply.

12 Exclusion of Warranties

All warranties, expressed or implied, are excluded from this agreement and shall not apply to the data or services (including software compatibility) that the Direct and Indirect Subscribers receive under this

agreement. Specifically, all implied warranties of merchantability and “fitness for a particular purpose” for the data or services (including software compatibility) that the Direct Subscriber receives from the FAA are also excluded under this MOA.

13 Limitation of Remedies

The FAA shall not be liable to the Direct Subscriber, Indirect Subscriber, or any other entity for any loss, damage, claim, liability, expense, or penalty, or for any indirect, special, secondary, incidental, or consequential damages deriving from the use of the ASDI and/or NASSI data.

14 Indemnification

The Direct and Indirect Subscribers agree to indemnify and hold harmless the Government and its respective officers, employees, and agents, from and against all claims, demands, damages, liabilities, losses, suits, and judgments (including all costs and expenses incident thereto), which may accrue against, otherwise be chargeable to the Government by reason of, or as a direct and proximate result of, the Direct or Indirect Subscriber’s use of the ASDI and/or NASSI data or software received under this agreement.

15 Termination of this Agreement

Any party may voluntarily terminate this MOA by written notice to the other party, provided no termination may be effective in less than ninety (90) calendar days from the date of such written notice. In the event a Direct Subscriber ceases its business operations, they must notify the FAA within five (5) business days. If the Direct Subscriber, or any of its Indirect Subscribers, fails to abide by the requirements of this MOA, the Direct Subscriber’s access to data covered under this MOA may be terminated immediately by the FAA for security or privacy issues. The FAA reserves the right, at its sole discretion, to reinstate a User’s access to the ASDI and/or NASSI data feed if the User can satisfactorily demonstrate to the ASDI/NASSI POC that they are in compliance with the terms of the MOA. However, in all cases, the FAA reserves the right for termination to be final and permanent, with no opportunity for reinstatement.

16 Disputes

Where possible, disputes will be resolved by informal discussion between the parties. In the event the parties are unable to resolve any disagreement through good faith negotiations, the FAA Director of System Operations Programs, AJR-4, will resolve the dispute. This decision is final and binding.

17 Notices

Written/electronic notices to the Direct Subscriber shall be sent to the following address:

Electronic address: _____

18 FAA Point of Contact (POC)

Written notices to the FAA shall be sent to the address shown below.

Federal Aviation Administration

David J Hurley Air Traffic Control System Command Center

ATTN: ASDI/NASSI POC, AJR-4

13600 EDS Drive, Suite 100

Herndon, Virginia 20171-3233

19 Effective Date

This agreement shall be effective on the date that the FAA signatory below executes it and shall remain in effect for five (5) years or until otherwise terminated.

20 Signatures

Direct Subscriber

☐ Class One

☐ Class Two

Federal Aviation Administration

Signature

Signature

Name (Printed)

Mike Gough

Title

Director of System Operations Programs, AJR-4
Title

Date

Date